

REMARKS

Claims 1-33 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments to the claims and remarks contained herein. Minor amendments have been made simply to overcome the rejections to the claims under 35 U.S.C. § 101 and 35 U.S.C. § 112. These amendments are not intended to narrow the scope of the claims.

REJECTION UNDER 35 U.S.C. § 112

Claims 30-33 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicants regard as the invention. The Examiner found the body of the claims to be directed to steps performed by a computer and not a program product as in the preamble. The Examiner found this inconsistent and therefore unclear. This rejection is respectfully traversed.

The Amended Claim 30 includes a computer program stored on a tangible computer medium embodying instructions executable by a computer. “[F]unctional descriptive material consists of data structures and computer programs which impart functionality when employed as a computer component.” USPTO *“Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility”*, October 26, 2005. “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized, and is thus statutory.” *Id.* “Claimed computer-readable medium

encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory." *Id.* at 53.

The body of amended Claim 30 is directed to a computer program executable by a computer. These instructions are stored on a tangible computer medium according to the preamble. Functionally descriptive material (computer program) is structurally and functionally interrelated to the tangible computer medium. Thus the body and preamble of Claim 30 are believed to be consistent.

Therefore, Claim 30 is allowable for at least these reasons. Claims 31-33 ultimately depend from Claim 30 and are allowable for at least similar reasons.

REJECTION UNDER 35 U.S.C. § 101

Claims 30-33 are rejected under 35 U.S.C. § 101 because the language of the claims raised a question for the Examiner as to whether the claims were directed merely to a non-statutory abstract idea that is not tied to a technology art, environment, or machine which would result in a practical application.

With respect to amended Claim 30, "[t]ransformation and reduction of an article 'to a different state or thing' is the clue to the patentability of a process claim that does not include particular machines." *Diamond v. Diehr*, 450 U.S. 175, 185 (1981). "If the examiner finds such a transformation or reduction, the examiner shall end the [subject-matter eligibility] inquiry and find that the claims meet the statutory requirement of 35 U.S.C. § 101." *Interim Guidelines for Examination of Patent Applications for Patent*

Subject Matter Eligibility at 19. In other words, a claim may not be abstract if it transforms a physical item to a different state or thing.

"The view that 'there is nothing necessarily physical about 'signals'' is incorrect." *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 858 F.2d 1053, 22 USPQ2d 1033 (Fed. Cir. 1992). "[C]onverting", 'applying', 'determining', and 'comparing' are physical process steps that transform one physical electrical signal into another." *Id.*

In Claim 30, the first and second signals are physical electrical signals. Moreover, similar to the method claimed in *Arrhythmia*, the method of Claim 30 includes steps of "producing" sequences based on the signals and "asserting" a failure indication signal based on one of the sequences. Thus, Claim 30 includes steps that transform at least one physical electrical signal into another. Claim 30 is therefore not directed to a mere abstract idea and is statutory for at least this reason.

Further, Claim 30 has been amended to include a computer program stored on a tangible computer medium embodying instructions executable by a computer. As discussed above, functional descriptive material, such as the computer program, becomes structurally and functionally interrelated to the tangible computer medium when it is recorded therein. Importantly, the computer program imparts functionality when stored, wherein the functionality is to perform a useful method. In other words, the computer program of Claim 30 is tied to a tangible computer medium to perform a useful result and is therefore not abstract. Thus, such recorded computer program is statutory.

Therefore, Claim 30 is allowable for at least these reasons. Claims 31-33 ultimately depend from Claim 30 and are allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

The Examiner states that claims 1-29 are allowed.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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